

APPLIED BIOTECHNOLOGY

Professional Science Master's Degree

<http://professionalmasters.science.orst.edu>

OBJECTIVE AND BACKGROUND

With initial support from the Alfred P. Sloan Foundation and in collaboration with technology industries, the Molecular and Cellular Biology (MCB) Program at Oregon State University offers a unique area of concentrated study in Applied Biotechnology, leading to a M.S. in MCB. Our objective is to train professionals in applied biotechnology with additional skills in business management, communication, and computer applications at the Master's level.



Increasing interest in genomic and metabolic engineering and the introduction of new high throughput technologies, have increased the demand for biotechnology technicians with new skills and conceptual training. Biotechnology companies now compete to hire from the limited pool of appropriately trained individuals. Graduates of this PSM Degree Program will be highly recruited for such positions.

Students entering the Program must meet regular university graduate admissions requirements and are expected to have a working knowledge of molecular science. The requirements for this PSM Degree include completion of: 1) a core curriculum, 2) professional courses emphasizing business and communication skills, and 3) an internship experience. Most students are expected to take two years to complete this degree, based on full-time study for a minimum of 55 credit hours.



Internship experiences, a critical component of the program, are important for helping to assimilate the student into the job market. They will be arranged, when possible, at institutions that can provide some financial support.

Professional Science Master's Degree programs do not typically provide support to students for their education. Financial aid information can be obtained from the OSU Financial Aid Office (call 541 737 2241 or visit <http://oregonstate.edu/admin/finaid>).

Additional questions should be directed to:
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CURRICULUM

(55-credit minimum program)

Core Curriculum (30 credits)

Techniques in Molecular & Cellular Biology (3)
Advanced Bioscience Technologies (2)
Cell Biology (3)
Genome Organization, Structure & Maintenance (4)
Genome Expression & Regulation (4)
Genomics & Cellular Evolution (4)

Electives selected in consultation with the advisor
(10 credits)

Cohort Course Curriculum (19 credits)

Communication in Science & Industry (3)
Research ethics (3)
Accounting & Finance for Decision-Making (3)
Management & Marketing Scientific Technologies (3)
Innovation Management (3)
Taken each of the first 3 terms:
Professional Seminar (1, 1, 2)

Internship (6-12 credits)

Internship

Suggested Professional Electives

Interpersonal communications (3)
Bargaining & negotiation (3)
Database management systems (4)

If a student has previously taken any required courses or their equivalents, program requirements may be modified. *(revised 1-08)*